DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The existing water distribution system experience significant water leaks. Daily production is approximately 125,000-GPD. Approximate population is 227. 125,000 GPD/227 = 550 Gal/person/day, which is in excess of typical 65 GPD/person. Failed isolation valves impact water maintenance and prevent shutoff during O&M operations.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will replace approximately 6,000-LF of existing water main the leaks more than 15% of the design flow of the entire system. It will also install 15 new hydrants and replace 20 failed isolation valves.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Other water	IHS Regular	1	Ls.	C
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	6000	Ft.	C
Water, Other - Other water	IHS Regular	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,435,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Two homes lacks water service.

Sewer: Two homes lacks sewer service.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Extend two water mains and install 2 service lines.

Sewer: Extend a sewer main. construct a lift station and force main and install 2 service lines.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Force mains, direct bury, sewer collection	IHS Regular	2000	Ft.	A
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2000	Ft.	A
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	1800	Ft.	A
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	1800	Ft.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	1	Ea.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	200	Ft.	A
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	200	Ft.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,143,945.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Unpermitted open dump.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Site selection report, select the new site, develop a SW Management Plan, construct the new landfill, close out old site.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste A (Plan) - Management Plan, Solid Waste	IHS Regular	1	Ls.	D
Solid Waste C (Development) - Development, solid waste site	IHS Regular	1	Ac.	D
Solid Waste C (Development) - Road, solid waste	IHS Regular	1	Ft.	D
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	1	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $470,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The Oscarville Traditional Village has no central water treatment facilities.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Provide a community water treatment plant. NOTE: -15 applied until CORE infrastructure is complete.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, new, no foundation, water treatment	IHS Regular	2500	Sf.	A
WATER TREATMENT - Foundation - conventional, local gravel, water treatment	IHS Regular	2500	Sf.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,460,125.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The community has no central sanitation facilities.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Provide a 150,000 gallon community water storage tank. NOTE: -15 applied until CORE infrastructure is complete.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	150000	Gal.	A
WATER DISTRIBUTION - Foundation - concrete foundation	IHS Regular	1	Sf.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $709,500.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The existing water supply consists of a drilled groundwater well for the watering point. Due to the age of the well construction and the small diameter, 4 inches, which limits the submersible pump size, the Sanitation Facilities Master Plan recommends a new well be constructed for the community.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will rehabilitate the existing water well. Activities to include, but not limited to Installing a new well pump, a new pressure pump, repair or replacement of misc. pipes and fittings, and replacement of the filter media. NOTE: -15 applied until CORE infrastructure is complete.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Ground water well, water source	IHS Regular	1	Ea.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $400,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None.

Sewer: The existing lagoon is not set up to receive waste from a piped sewer system.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Rehabilitate the lagoon to receive household waste from a piped system. NOTE: -15 applied until CORE infrastructure is complete.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Lagoon, borrow local material, sewer treatment	IHS Regular	1	Ac.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $750,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The community does not have have a piped water distribution system

Sewer: The community does not have a piped sewer collection system

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will provide a piped water distribution system mains, service lines and house plumbing. NOTE: -15 applied until CORE infrastructure is complete.

Sewer: This project will provide piped sewer collection systems including sewer mains, force main, lift station, house plumbing, 4 E1 units for remote homes and rehabilitate the existing lagoon

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	2500	Ft.	A
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	2500	Ft.	A
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	2000	Ft.	A
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	3100	Ft.	A
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,142,413.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: The unpermitted open dump site is reaching capacity.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Develope a new solid waste site and close the old site.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - Development, solid waste site	IHS Regular	1	Ac.	D
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	1	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $700,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The existing water supply impoudment, a 6,000LF 18-inch PVC transmission line, and , extends from a reservoir 6,000 feet to a small hydro plant. The City of Ouzinkie taps the penstock at the hydroelectric plant. The pipeline is constructed of thin wall PVC pipe meant for a non-pressure application (see attached report). A water level indicator device is not functional at the reservoir. A bypass valve does not exist at the hydroelectric plant.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project proposes to replace the 18-inch PVC transmission line with 20", SDR 11, HDPE pipe. HDPE pipe has much better freeze/thaw characteristics than PVC pipe. The proposed transmission line would be properly buried and anchored. In addition to the transmission line, other ancillary items would be installed including a bypass line at the hydroelectric plant as well as functioning control valves at the upper and lower ends of the transmission line. Air relief stations would be installed to relieve air buildup at high points in the line. An upgrade of the monitoring system would be constructed and tied in to the SCADA system at the water treatment plant.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	6000	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,260,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Currently the water main distribution system is corroded beyond repair which has led to major leaking in the system to the point of depleting the water storage tank. By depleting the water storage tank, the pressure in the distribution system dropped below the required 20 psi according to drinking water regulation 18 AAC 80.205 (A)(4). According to an ADEC letter from David Edmunds, the daily water use is between four and five times higher than it should be based on the population of Ouzinkie. This high water usuage is directly attributed to major leaks in the system. These leaks have caused back siphonage pulling ground water into the system that increased turbidity and lowered chlorine residuals in the drinking water. These leaks also provide mulitiple points for potential contamination within the system of which cases of giardia has been linked.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will replace 7,000 linear feet of existing water main with 8 inch HDPE water main.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	7000	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,435,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Unpermitted open site. Sludge disposal site is full and needs to closed.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Complete an engineering report to select new site, complete a solid waste management plan, construct new site and properly close existing site. Purchase landfill maintenance equipment with an onsite machine storage shed.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - General estimate, solid waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $110,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: Community's septic tanks do not provide anticipated treatment per EPA's NPDES permit.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Remove accumulated sludge, provide equipment and infrastructure for efficient annual sludge removal and maintenance, and rehabilitate existing tanks.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Septic tank, community, sewer treatment	IHS Regular	4	Ea.	B
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	B
Sewer, Other - Other sewer	IHS Regular	1	Ls.	B

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $150,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Above ground uninsulated pipes often freeze up. To prevent freezing residents waste water in the winter, putting tremendous stain on the new WTP. This also keeps O&M costs for treated water unrealistically high.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct insulated piped water distribution mains and service lines (above ground and buried).

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, above ground, water distribution	IHS Regular	1510	Ft.	C
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2485	Ft.	C
WATER DISTRIBUTION - Service lines, above ground, water distribution	IHS Regular	1050	Ft.	C
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	825	Ft.	C
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	25	Ea.	E

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,694,300.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: Domestic wastewater from this part of the City currently discharges untreated effluent directly into the Lisianski Inlet or onto the ground where pipes are broken.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: This project would provide a combined gravity/low pressure sewer collection system taking effluent to the community septic tanks for treatment.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	25	Ea.	C
SEWER COLLECTION - Force mains, direct bury, sewer collection	IHS Regular	300	Ft.	C
SEWER COLLECTION - Force mains, above ground, sewer collection	IHS Regular	900	Ft.	C
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	830	Ft.	C
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C
SEWER COLLECTION - Mains, above ground, sewer collection	IHS Regular	200	Ft.	C
SEWER COLLECTION - Service lines, above ground, sewer collection	IHS Regular	1050	Ft.	C
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	825	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,489,300.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Pelican does not comply with EPA/DEC surface water drinking water rules

Sewer: Community needs a means to dispose of community septic tank sludge, community needs to eliminate untreated individual wastwater discharge to the inlet

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construction of new water treatment storage, construction of water distribution system

Sewer: Lift station upgrades, construction of sewer collection system

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, new, no foundation, water treatment	IHS Regular	1920	Sf.	C
WATER TREATMENT - Foundation - freeze back piles, water treatment	IHS Regular	2800	Sf.	C
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	85000	Gal.	C
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	C
WATER DISTRIBUTION - Mains, above ground, water distribution	IHS Regular	365	Ft.	C
Water, Other - Other water	IHS Regular	1	Ls.	C
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	11025	Ft.	C
WATER DISTRIBUTION - Service lines, above ground, water distribution	IHS Regular	8500	Ft.	C
Water, Other - Other water	IHS Regular	1	Ls.	C
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	605	Ft.	C
SEWER COLLECTION - Force mains, direct bury, sewer collection	IHS Regular	385	Ft.	C

SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	C
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	300	Ft.	C
SEWER COLLECTION - Service lines, above ground, sewer collection	IHS Regular	900	Ft.	C
Sewer, Other - Other sewer	IHS Regular	1	Ls.	C
SEWER COLLECTION - Foundation - conventional, local gravel, sewer collection	IHS Regular	144	Sf.	C
SEWER TREATMENT - Septic tank, community, sewer treatment	IHS Regular	4	Ea.	C
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	1600	Ft.	C
Water, Other - Other water	IHS Regular	1	Ls.	C
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	1000	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $8,964,007.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Existing garbage collection truck is not suitable for the current needs, and the burn box is inadequate.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Provide new garbage collection truck and solid waste incinerator.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - Incinerator, solid waste	IHS Regular	1	Ea.	D
Solid Waste C (Development) - Equipment, solid waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $190,500.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The 20 year old, wood timber dam in Perryville is failing. The dimensions of the water impoundment structure are approximately 10 ft deep, by 30 ft across, with timber bracing. The wood is extremely rotten. There are numerous leaks that can't be repaired without replacing the timbers. The sluice gate has broken and does not open. Gravel, silts, and sands have accumulated behind the dam reducing water storage. The dam acts as a seasonal intake source. The primary water intake is a subsurface collection point in the streambed located higher up in the watershed. When there is enough precipitation, the upper intake feeds the distribution system by gravity. During the drier months the community relies on the lower dam, which needs to be pressurized at the water treatment plant in order to fill the water storage tank.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: The proposed project is to replace the timber dam. The existing dam would need to be removed, as would the accumulated silt and mud behind the dam. The dam would need to be grouted and keyed into the side-slopes of the creek-bed. New bracing would also need to be installed. Access to the site is difficult. Perryville is a remote community and moving freight into the village is challenging.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Surface water impoundment, water source	IHS Regular	1	Ea.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,250,000.00

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EXISTING DEFICIENCIES:

Water: The existing water treatment plant is not capable of meeting the surface water treatment rule, is over 30 years old and requires replacement. The plant is eligible for an NOV or Compliance Order by Consent, but has not received one yet.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct new surface water treatment plant capable of meeting the Surface Water Treatment Rule.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding: No ongoing sanitation construction scheduled for 2014.

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, new, no foundation, water treatment	IHS Regular	1500	Sf.	B
WATER TREATMENT - Foundation - concrete foundation	IHS Regular	1500	Sf.	B

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $3,525,000.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: Community lacks with adequate quantity and quality drinking water. No community wide water treatment system built yet. Community has several failing onsite water system with inadequate treatment. Community also lacks piped water distribution system.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This improvement includes a new water wells that provide a suitable quantity of water based on a 20- year demand form the community . Included in this improvement are a water treatment plant , 75,000 - galloon water storage tank that will provide community water demand, fire flow and emergency storage capabilities.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Ground water well, water source	IHS Regular	2	Ea.	D
WATER TREATMENT - Treatment plant, new, no foundation, water treatment	IHS Regular	850	Sf.	D
WATER TREATMENT - Foundation - conventional, local gravel, water treatment	IHS Regular	1500	Sf.	D
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	75000	Gal.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,034,043.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: No community wide water treatment system built yet. Community has several failing onsite water system with inadequate treatment. Community also lacks piped water distribution system.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Design and construction of single main pit orifice circulating water distribution system with service connections and in house plumbing. The improvement includes 1,300 feet of underground 8 inch waterline distribution piping to 5 core community buildings, 850 feet of 8 inch underground waterline extension and 550 of 2 inch waterline piping down to a watering point near the city shop The fire hydrants will be installed 300 feet apart. Additional 1250 feet of 8 inch waterline to close the distribution loop in the downtown area that will serve 14 residents.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	4450	Ft.	D
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	2900	Ft.	D
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	27	Ea.	D
WATER DISTRIBUTION - Watering point, water distribution	IHS Regular	1	Ea.	D
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,398,405.00

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EXISTING DEFICIENCIES:

Water: None

Sewer: The sewer main has settled in different areas of the main line, also near manhole invert tie-ins, causing belly (solids buildup & blocking points) profiles (recently camera documented).

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: The replacement of the clarified effluent collection main, manholes, and service lines to the new community drain field.Buried collection system replacement (of the old ductile iron sewer mains and services) from the homes served on the new community drain field and complete replacement of the remaining septic tanks (5 Nos) on the system as well.

Solid Waste: None

O & M: None

CIP Details:

Related Projects: VPSO renovation (starting August 2013), AEA wind mill (presently in design phase, construction scheduled for 2014), BIA roads (Starting August 2013), Native store (will complete in July 2013), Bulk head project (CDBG grant, close to completion).

Ongoing Funding: Individual on site water and waste water systems

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	2200	Ft.	D
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	1600	Ft.	D
SEWER TREATMENT - Septic tank/drainfield, individual, sewer treatment	IHS Regular	5	Ea.	D
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,192,599.00

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EXISTING DEFICIENCIES:

Water:

Sewer: Accessibility to the existing septics tanks are difficult due to trail conditions which discourages to pump the septic waste.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water:

Sewer: Improved access to pump individual septic tanks.Improvement of the existing access trail to increase accessibility of the City septic pumper to the residential septic tanks. Improvement includes approximately 2,500 feet of a 12-foot wide access road.

Solid Waste: None

O & M: None

CIP Details:

Related Projects: VPSO renovation (starting August 2013), AEA wind mill (presently in design phase, construction scheduled for 2014), BIA roads (Starting August 2013), Native store (will complete in July 2013), Bulk head project (CDBG grant, close to completion).

Ongoing Funding: Individual on site water and waste water systems

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Sewer, Other - Road, sewer other	IHS Regular	2500	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $591,350.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The water main and the associated services in two subdivisions have deteriorated and failed causing routine loss of pressure and water service to homes in the community. YKHC reported that just last year the subdivision was out of water at least 10 days due to leaks causing loss of circulation and subsequent freezing of lines. The main line through the subdivision is also the water main distribution line serving the entire community.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Replace a 2,100 foot section of water transmission/distribution main along Yaroq and Iquleq Circle and reconnect 39 homes with to existing service lines. This work will benefit all homes within the 50 unit subdivision. The roads will require some effort to be brought back up to pre-project conditions.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2100	Ft.	D
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	1950	Ft.	D
Water, Other - Road, water other	IHS Regular	1900	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,038,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The community is served with water and sewer facilities however some Individual homes have been added and they need water and sewer service line connections

Sewer: The community is served with water and sewer facilities however some Individual homes have been added and they need water and sewer service line connections

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Individual home water and sewer service line connections and in-door plumbing

Sewer: Individual home water and sewer service line connections and in-door plumbing

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	150	Ft.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	200	Ft.	A
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	2	Ea.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	2	Ea.	A
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $195,002.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: The current unpermitted open dump has uncontrolled burning that impacts the nearby school and has no trenches or fencing.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Close site and construct permitted landfill with burnbox at existing location.

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - Development, solid waste site	IHS Regular	1	Ac.	D
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	1	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $183,511.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water:

Sewer:

Solid Waste: Pitka's Point lacks a permited landfill

O & M:

PROPOSED FACILITIES:

Water:

Sewer:

Solid Waste: This project will construct a permited landfill.

O & M:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - Development, solid waste site	IHS Regular	5	Ac.	D

Health Impact Tier:
- A - First Service
- B - Regulatory Compliance
- C - Essential Upgrades
- D - Beneficial Upgrades
- E - Desired Upgrades

Total Costs: $512,500.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Water is supplied by a well and water treatment facility. Approximately ten percent of the residents haul treated water from the washeteria and use honeybuckets. The council offers water delivery services for residents. Approximately ninety percent of the homes are on a piped water and wasterwater system completed in October 2011. AVEC provides electricity through a transmission line from Saint Mary's.

Sewer: Approximately ten percent of the residents use honeybuckets.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Provide piped water to the remaining 10% of the population

Sewer: Provide wastewater piping remaining 10% of the population

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, above ground, water distribution	IHS Regular	1	Ft.	A
WATER DISTRIBUTION - Service lines, above ground, water distribution	IHS Regular	1	Ft.	A
SEWER COLLECTION - Force mains, direct bury, sewer collection	IHS Regular	1	Ft.	A
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	1	Ft.	A
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	1	Ea.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $880,897.00

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DRAFT

EXISTING DEFICIENCIES:

Water: There are no services to homes off of the water main in North Platinum. Water main terminates at the only yard hydrant/watering point in North Platinum. Hydrant freezes in the winter and as a result is often out of commission.

Sewer: No sewer service available.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Design main and service connections. Extend water main 1100 feet. Hook up homes with first services. Install in-house plumbing to 6 homes. NOTE: -15 pts applied as HITS has not been completed!

Sewer: Design main and septic systems. Construct septic tanks, whether individual, or shared systems due to site control and set back issues, to seven homes in North Platinum. NOTE: -15 pts applied as HITS has not been completed!

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Septic tank/drainfield, individual, sewer treatment	IHS Regular	7	Ea.	A
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	1100	Ft.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	500	Ft.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	8	Ea.	A
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	7	Ea.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $846,000.00

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DRAFT

EXISTING DEFICIENCIES:

Water: The residents of Platinum are currently drinking untreated surface water. The Alaska Department of Environmental Conservation has determined Platinum's shallow well source is a groundwater under the direct influence of surface water (GWUDISW). As such, the well water requires treatment per the surface water treatment rules, along with other federal drinking water rules and regulations. These requirements are currently not being met.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Build Platinum's first water treatment plant. The plant will use bag filtration and chlorination to provide treated water for all residents, and will provide lead and copper control. The building will measure approximately 900 sq. ft. and will supply treated water to distribution main lines and also provide a watering point for residents not connected to the piped system.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER TREATMENT - Treatment plant, new, no foundation, water treatment	IHS Regular	900	Sf.	B
WATER TREATMENT - Foundation - conventional, local gravel, water treatment	IHS Regular	4675	Sf.	B
Water, Other - Professional Services (engineering)	VSW/EPA	1	Ls.	B
Water, Other - Professional Services (engineering)	VSW/EPA	1	Ls.	B
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	300	Ft.	B

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,731,500.00

DISCLAIMER: Data displayed below is for informational purposes only.
Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: Platinum's water is currently untreated well water. ADEC has recently classified Platinum's water source as groundwater under the direct influence of surface water. All of Platinum's residences use this water, either from community watering points or from direct service to homes.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct a 20,000 gallon water tank to satisfy chlorine contact time requirement. NOTE: -15 pts applied since HITS is not complete.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	20000	Gal.	B
WATER DISTRIBUTION - Foundation - conventional, local gravel, water distribution	IHS Regular	325	Sf.	B

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $315,100.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: A residential onsite septic system has been installed within the mandated 200' setback of City Well No. 2. Both City Well No. 1 and City Well No. 2 are potential contamination sources to Platinum's water souce at City Well No. 3 because they may be through the shallow aquifer system.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Decommission City Well No. 1 and City Well No. 2 in accordance with ADEC guidelines.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Ground water well, water source	IHS Regular	1	Ea.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $99,635.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: Village does not have plumber or electrician to finish inside of building to complete the project before heating oil contamination created hazardous fumes in the building. Onsite septic system in a state of failure due to illegal connection to nearby residence.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construction washeteria facilities into a new shared facility with the water treatment plant. This will be Platinum's first washeteria.

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Washeteria, water portion, no foundation, water other	IHS Regular	500	Sf.	D
SEWER TREATMENT - Septic tank/drainfield, individual, sewer treatment	IHS Regular	1	Ea.	D
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $270,000.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: None

Sewer: The city's sewage pumper truck is undersized and failing. There is no garage for the city's sewage pumper truck.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Buy a new pumper truck and build a garage for pumper truck storage, to extend the life of the vehicle and keep maintenance costs down. NOTE:-15 pts applied since HITS is not complete.

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Shop / garage, no foundation, sewer collection	IHS Regular	1000	Sf.	C
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C
SEWER COLLECTION - Foundation - conventional, local gravel, sewer collection	IHS Regular	1000	Sf.	C
SEWER COLLECTION - Haul vehicle, sewer collection	IHS Regular	1	Ea.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $430,000.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: None

Sewer: Port Graham has five outfalls. These outfalls have exceeded their design life. Frequent breaks result in raw sewage discharges to the beach where subsistence activities occur. Due to the age and condition of the outfalls, repairs are challenging. In the near feature repairs will become infeasible.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Consolidate the five outfalls into one outfall. Improvements to the existing gravity sewer system will be required, including the construction of two sewer lift stations, the replacement of gravity sewer main with force main, and installation of a new community septic tank.

Solid Waste: None

O & M: None

CIP Details:

Related Projects: None

Ongoing Funding: Replacement of five (5) flush hydrants.

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Ocean outfall, sewer treatment	IHS Regular	1500	Ft.	C
SEWER COLLECTION - Force mains, direct bury, sewer collection	IHS Regular	2200	Ft.	C
SEWER COLLECTION - Lift station, sewer collection	IHS Regular	2	Ea.	C
SEWER TREATMENT - Septic tank, community, sewer treatment	IHS Regular	1	Ea.	C
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	4200	Ft.	C
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $3,130,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The community lacks a permitted sludge lagoon site for the disposal of sludge from the community septic tanks. The pumper truck is over 15 years old and is reaching the end of its design life. Significant maintenance is required to keep it operational; corrosion of the tank is significant. The IDL is 3 because the community sewer system includes septic tanks ahead of ocean outfalls (total of 5). These tanks must be maintained and the sludge removed. ADEC requires sludge lagoons be permitted (all lagoons regardless of type require permits). The Port Graham lagoon is not permitted. In addition to the permitting issue, the primary reason the current sewer IDL = 3 is because the sewer system has exceeded its design life. There are routine discharges of raw sewage to the beach from the outfall pipes due to corrosion and erosion. The repair of these leaks is becoming less reliable due to the condition of the pipe; it is feasible routine maintenance will not be able to correct this and a level 4 deficiency may result within 4 years.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Design and construct a new sludge lagoon. Provide a new pumper truck.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Lagoon, borrow local material, sewer treatment	IHS Regular	1	Ac.	C
SEWER TREATMENT - Septic tank pumper, sewer treatment	IHS Regular	1	Ea.	C
Sewer, Other - Road, sewer other	IHS Regular	500	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,362,500.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: There are eleven (11) fire hydrants in Port Graham. Five are inoperable, one is installed below the road grade and is partially buried, and five have internal seals and valve bodies that do not seal. The majority of the hydrants were originally installed in 1970, manufactured by five (5) different companies, and do not operate as intended due to failed internal seals. Inability to operate hydrants prevents proper maintenance and flushing of the distribution system which can impact drinking water quality and public health. Justification of HI=C is listed in journal comments.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: The Village of Port Graham requested and will receive approximately $33,600 from the State of Alaska to replace five hydrants in the most recent Governor's FY15 Budget. Documentation of the funding amount and and project scope are attached. This project will replace the remaining five (5) hydrants to include the water main tee connection, isolation gate-valve, hydrant base, lower barrel and upper barrel sections. The project will also re-locate partially buried hydrant to a more accessible location.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Other water	IHS Regular	1	Ls.	D
Water, Other - Other water	Other	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $99,000.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Permitted landfill is fenced and exceeding capacity. The Kenai Borough, who operates the site, is expanding this by approximately 1 acre. A temporary permit has been drafted that will be in effect until 2007 at which time a new landfill is required. The selected long term site is approximately 3 miles from the village.

O & M:

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Proposed solid waste landfill location has tentatively been selected and is 3 miles from the village. A feasibilty study will be needed to determine the cost to construct the road. The existing site will be closed.

O & M: None

CIP Details:

Related Projects: None

Ongoing Funding: Replacement of five (5) water hydrants.

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - Development, solid waste site	IHS Regular	1	Ac.	D
Solid Waste B (Closure) - Closure, solid waste site	IHS Regular	1	Ac.	D
Solid Waste A (Plan) - Management Plan, Solid Waste	IHS Regular	1	Ls.	D
Solid Waste C (Development) - General estimate, solid waste	IHS Regular	1	Ls.	D
Solid Waste C (Development) - General estimate, solid waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,345,000.00

DISCLAIMER: Data displayed below is for informational purposes only.
Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Modified sanitary landfill 6.5 miles north of town, in good shape. Needs improvement.

O & M: Nominal O&M organization.

PROPOSED FACILITIES:

Water:

Sewer: None

Solid Waste: Permit site, provide equipment & storage; no closure.

O & M: None

CIP Details:

Related Projects: None.

Ongoing Funding: None.

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - General estimate, solid waste	IHS Regular	1	Ls.	E

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $387,000.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: None
Sewer: None
Solid Waste: None
O & M: None

PROPOSED FACILITIES:

Water: None
Sewer: None
Solid Waste: None
O & M: None

CIP Details:

Related Projects: Design is complete
Ongoing Funding: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Washeteria, water portion, no foundation, water other	IHS Regular	1500	Sf.	D
Water, Other - Foundation - conventional, local gravel, water other	IHS Regular	1500	Sf.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,745,655.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The existing water mains are ductile iron and are experiencing extensive corrosion and leaking. The excess water lost attributed to the leaks are affecting the water treatment process.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will replace the oldest water main in the community of Port Lions with new HDPE SDR11 water main and will be Phase I of III for total water main replacement.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	4500	Ft.	D
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	4000	Ft.	D
Water, Other - Other water	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,650,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The community septic tanks on the Port Wakefield peninsula of Port Lions is in need of replacement due to undersizing and inadequate solids accumulation/settling. In addition, the ocean outfall for the community discharges too close to the shore and should be extended to ensure proper mixing.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Replace the community septic tanks on the Port Wakefield peninsula and replace the existing ocean outfall.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Septic tank, community, sewer treatment	Other	2	Ea.	C
SEWER TREATMENT - Ocean outfall, sewer treatment	Other	2500	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $765,092.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Water is being lost to leaks.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Locate leaks and repair or replace.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	1500	Ft.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $300,000.00

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DRAFT

EXISTING DEFICIENCIES:

Water: The existing 150,000 gallon water storage tank is adequate for most of the year. The concern residents have is inadequate volume for fire-fighting and to extending supply through periods of occaisional drought in the summer months.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: 150,000 gallon water storage tank, with engineered earthen foundation

Sewer: None

Solid Waste: None

O & M: None

CIP Details:

Related Projects: None

Ongoing Funding: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Foundation - conventional, local gravel, water distribution	IHS Regular	600	Sf.	E
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	100000	Gal.	E

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,240,000.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: Some homes lack plumbing to participate in community haul system. Homes on the piped system not served by previously completed phases.

Sewer: Some homes lack plumbing to participate in community haul system. Homes on the piped system not served by previously completed phases.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Build in home improvements to facilitate community haul system or provide piped service lines to existing mains.

Sewer: Build in home improvements to facilitate community haul system or provide piped service lines to existing mains.

Solid Waste: None

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	8	Ea.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	8	Ea.	A
WATER DISTRIBUTION - Haul vehicle, water distribution	IHS Regular	1	Ea.	A
SEWER COLLECTION - Haul vehicle, sewer collection	IHS Regular	1	Ea.	A
WATER DISTRIBUTION - Service lines, above ground, water distribution	IHS Regular	1000	Ft.	A
SEWER COLLECTION - Service lines, above ground, sewer collection	IHS Regular	1000	Ft.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	14	Ea.	A
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	14	Ea.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,910,170.00

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DRAFT

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Community does not have enough dumpsters for the population. Currently the operator hauls every day and trash still piles up at base of dumpsters. EPA funded original 4 twelve cubic yard dumpster and 4WD flatbed with stellar hook. System performs exemplary; however not enough equipment to meet demand. Running truck into the ground and dumpsters are overloaded.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Provide 4 more dumpsters; second 4WD flatbed haul vehicle with stellar hook.

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste C (Development) - Other solid waste	IHS Regular	1	Ls.	D
Solid Waste C (Development) - Equipment, solid waste	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $150,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The City of Ruby has a 1250-gallon Sewage Vacuum truck that they utilize to pump existing individual septic tanks. Several drainfields have failed and homeowners are using their septic tanks as holding tanks. The City disposes of septic sludge at the landfill. The landfill has an area cordened off and permitted by the Alaska Department of Environmental Conservation (ADEC) to receive septic sludge. This area is small and nearly at capacity.The City does not have anywhere where they can legally disposed of sewage waste from septic tanks now functioning as holding tanks. The City plans to use the vacuum truck to pump out holding tanks as part of a haul system outlined in future phases of its sanitation projects. However the City has no place to dispose of sewage waste (solids and effluent) from holding tanks. The existing lagoon was only designed and sized to treat wastewater from the City Washeteria because of concerns the City expressed regarding the placement of the lagoon in the bowl area. Again, the existing washeteria lagoon is not designed/permitted to except septage. The majority of homes are located in the bowl area, a sewage lagoon designed to receive septic waste from holding tanks and septic systems would negatively impacted the lives of these residents. The existing lagoon receives low strength waste water primarily generated by washing machines in the washeteria. This waste water is not high in biological hazardous waste relative to concentrated holding and septic tank waste.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Provide the City of Ruby with a community multi-cell wastewater sewage lagoon that will safely collect septic sludge and holding tank waste per ADEC regulations. -15 pts applied, # of homes claimed is not consistant with the project.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Lagoon, borrow local material, sewer treatment	IHS Regular	3	Ac.	C
Sewer, Other - Road, sewer other	IHS Regular	1000	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,397,361.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: 28 Homes lack running water.

Sewer: 28 homes lack means of sewage disposal.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Construct individual water plumbing for haul systems in 28 homes, as per facility master plan.

Sewer: Construct individual sewer plumbing for haul systems in 28 homes, as per facility master plan.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	28	Ea.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	28	Ea.	A
SEWER TREATMENT - Septic tank/drainfield, individual, sewer treatment	IHS Regular	28	Ea.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,966,716.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: These homes haul water from the washeteria watering point. There is no other community system. Most resident have individual wells for domestic water.

Sewer: These homes use pit privy for human waste disposal. There is no community system. Most residents have septic tank and drain field systems.The scattered sites program has served other homes in Ruby but these homes lack indoor plumbing and that is a requirement for eligibility.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will provide in home water service plumbing, fixtures, pressure tank, and individual well.

Sewer: This project will provide in home sewer service plumbing, fixtures, septic tank, and drain field.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - In-house plumbing, gravity, sewer collection	IHS Regular	11	Ea.	A
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	350	Ft.	A
SEWER TREATMENT - Septic tank/drainfield, individual, sewer treatment	IHS Regular	11	Ea.	A
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A
WATER DISTRIBUTION - In-house plumbing, water distribution	IHS Regular	11	Ea.	A
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	350	Ft.	A
WATER SOURCE - Ground water well, water source	IHS Regular	11	Ea.	A
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	A

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,234,601.00

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Updates Completed By Engineer

EXISTING DEFICIENCIES:

Water: None

Sewer: None

Solid Waste: Site is unfenced, open, and not permitted. Site is very close to housing developments. Dogs and children have direct access to the site, creating the potential for vector transmission of disease.

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: None

Solid Waste: Construct a new lanfill for the community and close the existing landfill.

O & M: None

CIP Details:

Related Projects:

Ongoing Funding:

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Solid Waste A (Plan) - Management Plan, Solid Waste	Other	1	Ls.	D
Solid Waste C (Development) - Professional Services (engineering)	Other	1	Ls.	D
Solid Waste C (Development) - Development, solid waste site	IHS Regular	1	Ac.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,647,500.00

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EXISTING DEFICIENCIES:

Water: Many of the fire hydrants for the community have been removed, and the condition of current hydrants is unknown. Some are inconveniently located in roadways and the deadends and regular flushing can not be conducted,

Sewer: Many manholes are damaged and the covers or lids are missing, and some manholes are elevated above the roadway, causing traffic and driving hazards and clogs

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Additional fire hydrants for flushing the distribution line will be added on the two upper water circulation loops, and some fire hydrants will be relocated out of the roadways.

Sewer: Concrete manhole covers and heavier, cast-iron lids will be put on all manholes. Select manholes will be modified so they are level with the roadways.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
Water, Other - Other water	IHS Regular	1	Ls.	D
Sewer, Other - Other sewer	IHS Regular	1	Ls.	D
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $477,400.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Current water mains are almost 40 years old, largely constructed with PVC and copper piping. Many of the older water service lines cannot be turned off or isolated from the distribution system due to corroding valves and fittings.

Sewer: Current sewer mains are almost 40 years old, largely constructed with PVC. Several of the lower system sewer mains are surcharged with sewage.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: Lower water mains will be replaced with 4" HDPE pipe, and new house services and fire hydrants will be installed.

Sewer: Current sewer mains will be replaced with 8" gravity sewers and new house services will be installed. Manholes in the area will also be made to be watertight.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER COLLECTION - Mains, direct bury, sewer collection	IHS Regular	1360	Ft.	C
SEWER COLLECTION - Service lines, direct bury, sewer collection	IHS Regular	19	Ft.	C
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2450	Ft.	C
WATER DISTRIBUTION - Service lines, direct bury, water distribution	IHS Regular	19	Ft.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,588,712.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The upper elevations of the community experience low water pressures, particularly during winter conditions, when circulation through water mains is required to prevent freezing.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: A third circulation loop will be added in the vicinity of the higher elevation homes in the community to allow for higher and more consistent pressures, as well as to allow for future growth to the existing subdivision. A dedicated fire pump will also be installed for this loop.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Mains, direct bury, water distribution	IHS Regular	2900	Ft.	C
Water, Other - Other water	IHS Regular	1	Ls.	C
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $659,130.00

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EXISTING DEFICIENCIES:

Water: None

Sewer: The lift station is non-functional due to the undersized septic tank used to separate the solids from the effluent. Per ADEC, the existing lagoon is undersized and cannot receive the solids from the lift station (grinder pumps) in its current configuration. The lift station has been upgraded with effluent pumps however the inline septic tank preceding the lift station requires monthly pumping. The community topography and equipment availability prevents the tank from being pumped in the winter.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Install an appropriately sized septic tank, allowing the community to pump the tank annually.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Septic tank, community, sewer treatment	IHS Regular	1	Ea.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $200,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: None

Sewer: The existing, newer community lagoon is undersized. The lift station cannot pump solids to this lagoon per ADEC. The septic tank ahead of the lift station is undersized and cannot be maintained which causes the effluent pumps to clog and fail. The lift station consequently discharges to to the lower, unpermitted lagoon. The lower lagoon has a short circuit that discharges effluent on to the river bank near a subsistence and fishing area. A preliminary engineering report is required to appropriately scope the lagoon expansion. The existing community lagoon is on a hillside limiting expansion options. The challenging topography will require the report to accurately estimate construction costs. A PER is requested to be funded first.

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: None

Sewer: Construct a lagoon expansion. Retrofit the lower lift station to allow for efficient grinder pumps and the removal of the undersized septic tank ahead of the lift station.

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
SEWER TREATMENT - Lagoon, borrow local material, sewer treatment	IHS Regular	5	Ac.	C
Sewer, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $2,200,000.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: The current 59,000 gallon water storage tank has light corrosion, 2 to 3 days of emergency storage capacity, and no fire flow capacity.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: A new water storage tank will be built in the vicinity of the current storage tank with a volume of 175,000 gallons; enough storage to fulfill the community's needs, provide 5 days of emergency storage, and contain water for fire flow.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER DISTRIBUTION - Water storage tank, no foundation, water distribution	IHS Regular	175000	Gal.	C
WATER DISTRIBUTION - Foundation - concrete foundation	IHS Regular	1850	Sf.	C
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	C

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $1,675,950.00

DISCLAIMER: Data displayed below is for informational purposes only.

EXISTING DEFICIENCIES:

Water: Only one well is connected to the water system. Another well has been drilled, but it is not connected to the system. Containment berms for the bulk fuel tanks for the pump house are unlined and eroding, which could lead to groundwater contamination in the case of a leak.

Sewer: None

Solid Waste: None

O & M: None

PROPOSED FACILITIES:

Water: This project will connect the other existing well to the water system as a backup well, and replace the single-walled fuel tanks at the pump house with double-walled fuel tanks. This project will also install a backup generator for the water treatment plant and piping upgrades for the pump house to allow for general and fire flow increases.

Sewer: None

Solid Waste: None

O & M: None

COST ESTIMATE

Scope Item	Funding Source	Quantity	Units	Health Impact Tier
WATER SOURCE - Ground water well, water source	IHS Regular	1	Ea.	D
WATER TREATMENT - Treatment plant, rehabilitation, water treatment	IHS Regular	1	Ea.	D
Water, Other - Professional Services (engineering)	IHS Regular	1	Ls.	D

Health Impact Tier:
A - First Service
B - Regulatory Compliance
C - Essential Upgrades
D - Beneficial Upgrades
E - Desired Upgrades

Total Costs: $318,550.00